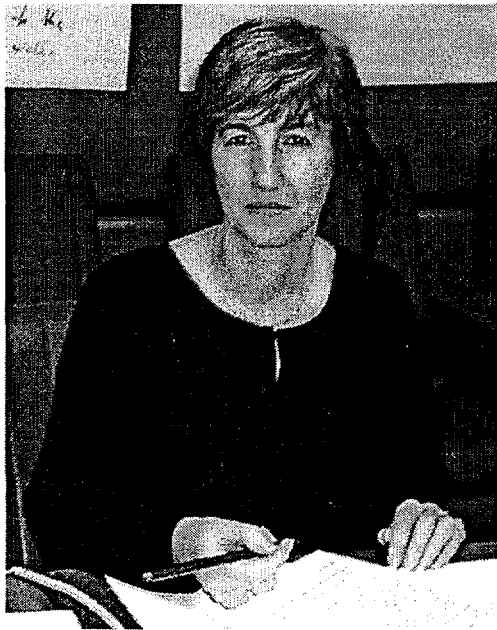


# ISAM NEWSLETTER


**Number 4**
**April 1999**

## THE INTERNATIONAL ATOMIC ENERGY AGENCY PROGRAMME ON IMPROVEMENT OF SAFETY ASSESSMENT METHODOLOGIES FOR NEAR SURFACE WASTE DISPOSAL FACILITIES, ISAM

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The second ISAM Research Co-ordination Meeting was a success. 65 participants from 32 countries attended the meeting. Annette Pinner is the ISAM Chairperson, she is conducting the programme in a very democratic, flexible and effective manner. Her contribution to the programme is very much appreciated. We would like to thank the participants, the ISAM Co-ordinating Group and Ms. Pinner for a job well done.

The International Atomic Energy Agency (IAEA) launched the Co-ordinated Research Programme on Improvement of Safety Assessment Methodologies For Near Surface Radioactive Waste Disposal Facilities (ISAM) in November 1997. The second Research Co-ordination Meeting (RCM) was held in Vienna in February 1999.

The aim of the ISAM programme is to review and enhance post-closure safety assessment approaches and tools for near surface disposal facilities, as well as providing participants with practical safety assessment experience. The ISAM Co-ordinating Group manages the programme on behalf of the IAEA. The programme is structured on the basis of three Working Groups (Scenario Generation and Justification, Modelling and Data, and Confidence Building), three Safety Case Groups (Vault, Radon-type Facility and Borehole Safety Case Groups) as well as an ISAM Virtual Workspace Group.

**This newsletter summarises the progress made by each Group during the second RCM along with plans for future work.**

### IMPORTANT DATES:

**10-14 May 1999**, Borehole Safety Case Group meeting, Pretoria, South Africa

**28 June - 2 July 1999**, ISAM Working Groups Meeting, Madrid, Spain

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## 1. ISAM CO-ORDINATING GROUP MEETING



The Co-ordinating Group met on a regular basis during the RCM to review progress and ensure consistency and good communication between the different Groups.

A number of issues were raised and progressed.

**Output from the programme.** The participants agreed to propose that an IAEA TECDOC series should be produced at the end of the ISAM programme in November 2001. A summary document should be issued, which will:

- provide an overview of the ISAM programme;
- provide an overview and discussion of the safety assessment process;
- summarise each Working Group's evaluation of available approaches and tools and how they have been enhanced during the ISAM programme;

- document the lessons learnt during the implementation of these tools and approaches by the Safety Case Groups;
- make recommendations to the IAEA for future work in this area.

The reports will document all the work carried out by the Scenario Generation and Justification, Modelling and Data, and Confidence Building Working Group. This will include not only the final versions of the technical documents which are being prepared by each Group but also copies of questionnaires, summaries of questionnaire responses, information on computer codes, etc. Similarly, the documents will document all the work carried out by the Vault, Radon-type Facility and Borehole Safety Case Groups. Sufficient information will be presented to allow the IAEA to use these documents for training purposes. It was agreed that the TECDOCs should be independently peer reviewed prior to submission to the IAEA for publication. The terms of reference for the review will be set by the participants. A TECDOC template will be placed on the Virtual Workspace in order to facilitate production of the documents.

**Overall programme of work.** The following overall programme of meetings (Table 1) was proposed. Currently two locations have been proposed for the next RCM in June 2000: China or the IAEA, Vienna. The Co-ordinating Group will consider this issue at their next meeting in November 1999.

Research Co-ordinating Meetings	June 2000 (China, <b>provisional</b> ) June 2001(Vienna, <b>provisional</b> )
Co-ordinating Group	1-5 November 1999 (Vienna, Confirmed) February 2000, February 2001, November 2001
Scenario Generation and Justification Working Group	28 June-2 July 1999 (Madrid, Confirmed)
Modelling and Data Working Group	October 1999 (Brazil, <b>provisional</b> )
Confidence Building Working Group	28 June-2 July 1999 (Madrid, Confirmed)
ISAM Virtual Workspace Group	28 June-2 July 1999 (Madrid, Confirmed)
Vault Safety Case Group	28 June-2 July 1999 (Madrid, Confirmed)
Radon-type Facility Safety Case Group	Second half 1999 (Moscow or Sofia, <b>provisional</b> )
Borehole Safety Case Group	10-14 May 1999 (Pretoria, South Africa, Confirmed)

Table 1: ISAM meetings

**Lessons learned** A number of areas for improvement were identified during the RCM:

- The Co-ordinating Group should ensure that consistent terminology is used throughout the programme. Copies of the IAEA glossary were made available to all Working Group and Safety Case Leaders.
- It is important to ensure that information is fully available to all participants before the RCM, not just those who have attended previous meetings. In future all relevant material will be placed on the ISAM Virtual

Workspace before the RCM and all participants will be contacted via email to ensure that they are aware that the material is available. Participants will also be invited to choose a Working Group and Safety Case Group when they register for the next RCM so that they can target their preparation for the meeting.

- It was recognised that there would be benefits to the programme if the use of the ISAM Virtual Workspace could be improved. A small group was, therefore, set up to manage the Workspace (see Section 6 of this Newsletter).

- The poster session stimulated a good level of debate. All participants with Research Agreements will be asked to present a poster at the next RCM; participants without Research Agreements are invited to do likewise.

Conferences/publications. It was agreed that the Co-ordinating Group would produce a poster on the ISAM programme for general use at conferences etc. This will also be made available to participants. Participants are also invited to distribute copies of the ISAM newsletter at conferences if they judge this to be appropriate. Lastly, participants are invited to make reference to the ISAM programme in any technical papers they write about their own work but are requested to copy the paper to the ISAM Scientific Secretary.

ISAM CD-ROM. The Co-ordinating Group agreed that the ISAM CD-ROM should comprise a direct copy of the final version of the ISAM Virtual Workspace as well as information on Member States' disposal/storage facilities.

## 2. SCENARIO GENERATION AND JUSTIFICATION WORKING GROUP

The activities of the Scenario Working Group (SWG) were attended by 20 people, which included a few new members. The SWG had the opportunity to meet three times during the RCM with the main focus of these sessions being to:

1. report on progress made since the first RCM;
2. make decisions concerning pending questions; and
3. identify goals for the short and longer term, and to draw up plans to accomplish these goals.

The *first session* was used to give an overview of the document, to highlight certain issues and to obtain general comments on the document from the SWG members. A very important decision was also made, namely to change the emphasis from a user friendly FEPs database for near surface disposal systems, to only a comprehensive FEPs list. The document will be changed according to this decision. A major portion of this session was devoted to a discussion on the need for grouping the FEPs according to different compliance periods. It was decided, however, that it is outside the scope of this group but that guidance in the use of the FEPs list is very important.

For the *second session*, the working group was divided into three groups, namely a group that looked at generic scenarios, a second group that looked at methods to move from FEPs to scenarios and a third group that commenced with the revision of the FEPs list. Persons to co-ordinate these activities have been identified.

The "*generic scenarios subgroup*" led by Doug Graham held a general discussion on the issue and identified key areas where the existing information on generic scenarios can be improved and expanded. A huge amount of information is available from the sites in the United States which will make a useful contribution to generic scenarios. Other issues that were identified and that will be addressed are the difference in terminology between the different scenarios and the need to have a flowchart of the generic scenario approach.

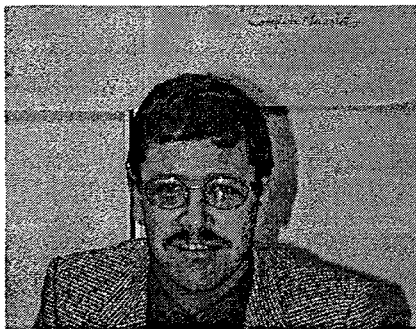
The "*FEPs to scenario subgroup*" led by Matt Kozak also started with a general discussion on processes to move from FEPs to scenarios and to the definition of scenarios. They felt that the definition presented in Chapman *et al.* (1994), which is Definition 6 in the document, is the most suitable definition for our purposes. What is important however, is to be consistent in terms of what the definition means and how we apply it in scenario generation activities. They also discussed the possible overlap with the Modelling and Data Working Group who look at methods to develop conceptual models. In particular the use of "External" and "Internal" FEPs to generate scenarios presents a possibility for confusion. Other issues that were identified that must be addressed are the role of FEPs and the role of scenarios at various stages of the safety assessment approach. The input from the safety case groups will be valuable in this regard.

The session of the "*FEPs review subgroup*" led by Mr. Japie van Blerk was the first attempt to review the FEP list within a small group of people. Although only the Assessment Context FEPs were reviewed, the usefulness of such a process was illustrated. In particular, two issues were identified, namely whether FEPs related to health effects other than radiological should be included and also whether FEPs related to the radiological impact on biota other than man should be included.

The *third session* was devoted to reporting back from the subgroups and, because of the major changes, also to draw up a Revised Draft Document Structure.

Future Work. Tentatively, a meeting for the working group is planned during June/July 1999 in Madrid. To facilitate useful discussions and contributions at this meeting, it is proposed that draft versions of the above-mentioned tasks be forwarded to Japie van Blerk by the end of April 1999. During May 1999 the contributions will be incorporated into the SWG document to be sent out for information before the working group meeting. SWG members will also be organized in

groups according to their field of expertise in order to review the ISAM FEPs list. This will be an ongoing activity. Inma Simon will represent the SWG at the Workspace Working group.



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### 3. MODELLING AND DATA WORKING GROUP

Progress during the RCM. During the second RCM held in Vienna a brief presentation showing the progress made by the Modelling and Data Working Group was made. A technical review of the second version of the Modelling and Data Working Group report was carried out by the participants to improve the quality and consistency of the document. The following amendments and improvements were agreed:

- to update the document so that it references current models;
- to use IAEA documents as a primary source of information (including the glossary);
- to balance the information in the current document (reducing the emphasis on groundwater);
- to re-arrange the texts already written to fit into the final improved structure;
- to incorporate the Rio meeting comments into the document;
- to adopt a common format;
- to ensure that the units in the document are consistent;
- to assign responsibility for the different chapters to different individuals to help with information selection;
- to include a comment in the data parameter chapter stating that the data values are provided by way of illustration – they are not recommended values and, unless specified, they are not necessarily best estimate or mean or median;
- to move the code chapter to an annex and then let the IAEA decide what part of the text should be transferred to the ISAM Virtual Workspace;

- there is no need to include an exhaustive list of scenarios, techniques, models, solutions etc – more information will be given on the Virtual Workspace and in references;
- to include cross references to work by other Working Groups;
- the report is divided into near field, far field and biosphere sections for convenience. Issues relevant to more than one section will be discussed in the first section and then a cross-referenced to later sections.

Future work. The next meeting of the Modelling and Data Working Group will be in October 1999. Prior to this meeting the leaders of each chapter will:

- incorporate the comments made during the second RCM;
- format the document;
- complete each subsection of the document with information that will be provided by the key people identified during the meeting;
- send the final chapter version to the leader of the Modelling and Data Work Group (Mr. Paulo Heilbron, Brazil), not later than 1 September 1999, in order to have a complete version of the document for independent peer review (probably in October 1999).

Key dates/milestones leading up to the next meeting are as follows:

- early May: send early draft subsections to reviewers;
- early June: contributions to revised drafts to Chapter Leaders;
- mid June: Chapter Leaders to send out draft of revised chapters;
- mid August: comments to Chapters Leaders;
- end August Chapter Leaders to send contributions to Mr. Paulo Heilbron;
- end of September: Paulo Heilbron to send a copy of the report for those who will participate in the October meeting.



**Mr. Paulo Heilbron**

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#### 4. WORKING GROUP ON CONFIDENCE BUILDING

The Confidence Building Working Group had three half-day working sessions and also provided a topical session on Public Acceptance and Safety Assessment (see discussion below). Approximately 20 people participated in the activities of this working group during the RCM.

Topical session on Public Acceptance and Safety Assessment. A topical session of public acceptance and safety assessment was held. Three presentations were given:

- UK: Regulatory review of the Drigg disposal authorisation (Ms. Susan Duerden);
- Belgium: Response to the ISAM communications questionnaire (Mr. Laurent Dujacquier);
- Sweden: Public acceptance and safety assessment in Sweden (Mr. Jan Carlsson);

There was considerable debate on how the ISAM programme should approach this area. In general, the participants recognised the importance of communicating the basis and results of safety assessments to the public but they are not directly involved in the communication process. It was agreed that participants should consider what advice needs to be given to safety assessors; in particular, experience in involving the public in scenario generation will be assessed by the Confidence Building Working Group. However, work on the communication process itself was considered to be outside of the remit of the ISAM programme, although participants may choose to recommend that the IAEA considers communication issues via a different route.

During this session it became apparent that there is public concern about protection of the environment in addition to the protection of human health. Participants agreed that this issue is outside of the remit of the ISAM programme but invite the IAEA to note this concern.

Progress during the RCM. During the first half-day working session all attendees were brought up-to-date with the ongoing work in the four topic areas. These four areas are Compilations (led by Ms. Borislava Batandjjeva), Quality Assurance (Mr. John Harries), Communications (Mr. Laurent Dujacquier), and Uncertainty/Sensitivity Analysis (Mr. Francisco Luiz de Lemos). The documents from all four areas were tabled for comment and discussion.

In the second working session, work was begun on the two audit trail forms being developed under QA – Parameter Input Control Form and a Document Review Form. For both forms a procedure for the use of the form was developed

and will be made available for use by all the ISAM participants for the review of their documents and recording of parameters used in the analysis of the safety cases.

The CBWG took a close look at the time-line of the ISAM programme and it became clear that a strong effort will be required in the near future to consolidate the activities and to produce a draft document of the WG activities. Some discussion took place regarding how to produce a document describing the CBWG activities. Two ideas were put forward: to structure the document with four main subsections, one for each of the activity areas, along with an introduction and summary; alternatively, to structure the document in two sections related to internal and external confidence building areas. It was decided that both ideas would be developed and then a choice would be made on the preferred option – this choice needs to be made well in advance of the next working group meeting.

As a last item, the CBWG briefly revisited the list of issues/tasks that were (at previous meetings) determined to be of high priority to decide whether contributions in these areas were still warranted. It was decided that two areas would receive some effort:

1. examination of the role and use of facility markers and institutional controls within safety assessment;
2. the issue of communicating safety assessment issues to the public and (where this was done) providing the public with a mechanism to input into safety assessment.

Future work. The next CBWG meeting will take place in late June or July with approximately 10 people expressing interest in attending that meeting. The objective of the meeting will be to begin assembling the CBWG document and to systematically examine the information received as a result of the questionnaires circulated from the WG.

If you are interested in participating actively in this Working Group please contact the IAEA Scientific Secretary or the Working Group Leader.



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## 5. SAFETY CASES

*Group Safety Cases.* All three of the safety cases have a good schedule to complete the safety case by the final RCM, but much work still needs to be done. At the RCM, it was decided that each safety case will be documented.

An overall plan was established for ensuring that these goals will be met by the end of the program. By the next RCM, it is anticipated that all scenario analyses will be completed for all safety cases, and that substantial progress should be made on identifying and documenting conceptual and mathematical models. Ideally, some consequence analyses will also have been completed. This schedule would mean that consequence analyses, interpretations, and documentation will be conducted prior to the last RCM. To meet this schedule, all safety cases plan to have interim safety case meetings of a few participants; the purpose of the meetings will be to accelerate the work.



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### 5.1 Vault Safety Case

*Progress during the RCM.* The Group met during three half-day sessions. During the first session, the Group reviewed three documents: version 3.0 of the Assessment Context document; version 1.0 of the Risley meeting notes; and version 1.0 of the design scenario. Comments were documented and participants invited to send any further comments

to the Safety Case Leader (Mr. Eugene Kelly) by the end of February. During the second session, following a presentation of the "ANDRA approach" by Ms. Sylvie Voinis, the Group divided into two sub-groups: one to revise the design scenario; the other to discuss the application of the "ANDRA approach" to the vault safety case. The Group then came back together for the final session to discuss the outcome of the sub-group meetings. Some further modifications to the revised design scenario were agreed and a presentation of the "ANDRA approach" to the vault safety case made. Mr. Geert Volckaert provided a brief overview of the "Belgium approach". Following discussions, it was decided that the approach developed at the Risley meeting should continue to be used, at least for the initial assessment of the design scenario. Ms. Inmaculada Simon then presented an initial application of interaction matrices to identify FEPs interactions for the vault safety case.

*Future work.* It was decided that at the next group meeting (in June 1999) the Group will apply interaction matrices to the vault safety case to assist in the identification of FEPs interactions and conceptual models. Agreed actions arising from the meeting are shown below (see Table 2 below).



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Action	Action on	Date
Upload to workspace: assessment context document; Risley notes; the revised Design scenario; and the draft meeting notes	Richard Little	8 February 1999
Comment on the above documents	Participants	End February 1999
Produce note on the use of interaction matrices	Inmaculada Simon	End March 1999
Provide more information on the vault design	John Harries	End March 1999
Provide more information on the ANDRA approach	Sylvie Voinis	End March 1999
Provide more information on the Belgium approach	Geert Volckaert	End March 1999
Produce note on the approach used at Risley to complement the existing figure of the approach	Inmaculada Simon	End March 1999

Table 2. Vault Safety Case Action Plan

## 5.2 Radon-Type Facility Safety Case

*Progress during the RCM.* Good progress was made on the RADON-type Safety Case leading up to, and during the RCM. For the assessment context, a revised draft was made available prior to the RCM; during the RCM all essential features of the assessment context were about inventory description, facility design, and site characteristics. A final version of the facility description is expected to be completed by March 1999.

The Safety Case has established a plan to complete the Safety Case by the end of the programme. To ensure that this schedule is met, it was found that improved continuity of leadership was necessary for the Safety Case. Consequently, Mr. Andrei Gousov and Ms. Borislava Batandjeiva were approved to be joint Safety Case leaders.

*Future work.* Scenario development activities have not yet begun. An initial draft of a scenario development document will be completed by the end of February. At that time it will be circulated to a sub-group of the Safety Case membership that is particularly interested in scenario development and analysis. The draft will be reviewed and revised by the sub-group, then circulated to the full Safety Case Group for review. This second review is expected to be completed by May 1999. Tentatively, a Safety Case meeting is planned for June 1999 to discuss this draft and future work in the Safety Case. In parallel with the FEPs analysis and development approach, one Safety Case member will specify scenarios from general knowledge of the disposal facility, with the intent that these scenarios will be audited against the FEPs list in the future.

Action	Action on	Date
Draft scenario analysis section for review	Matt Kozak	27 February 1999
Comment on the above documents	Scenario sub-group	End February 1999
Revisions to scenario draft	Matt Kozak	End March 1999
Review by full safety Case group	All	15 May 1999
Revisions to scenarios draft	Matt Kozak	End May 1999
Final Assessment Context	Andrei Gousov	End March 1999
Final Facility Description	Andrei Gousov	End March 1999

Table 3. Radon Safety Case Action Plan



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## 5.3 Borehole Safety Case

*Progress during the RCM.* Considerable progress was made during the meeting of the assessment context and on the facility description. The assessment context was revised and the FEPs list was used as a checklist to ensure that all the aspects were covered. The assessment context was provided to all group members for comment.

Mr. Geert Volckaert was asked to comment on certain issues concerning the chemistry of the waste containers and proposed inventory. His

proposals were accommodated in the final assessment context. Summaries of the Vaalputs site description were provided to the group members, as well as the Vaalputs safety report, which contains more detailed information.

It was decided that a Safety Case meeting will be held in Pretoria, South Africa between 10-14 May 1999.

*Future work.* The detailed FEPs list will be screened by each member so that it can be compared and revised at the Safety Case meeting.



During the meeting, the individual FEPs lists will be revised and the scenarios and conceptual models will be finalised.



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## 5.4 Individual Safety Cases

The following posters on individual safety cases were presented.

- Republic of Slovenia: Slovenian safety case – present activities (Mr. Branco Kontic, Mr. Borut Petkovsek and Ms. Nadja Zelenik).
- Czech republic: Modeling of radionuclide transport from the repository Richard (Mr. Jan Holub).
- India: Safety analysis of radioactive waste storage and management site, Trombay (Mr. Ravi Rakesh).
- Russian Federation: Assessment of underground radionuclide migration/ Assessment of the atmospheric release/Assessment of contamination in result of maximum accident from the object 'shelter' (from accidental block of the Chernobyl power station) (Mr. Boris Serebryakov).
- Cuba: A Cuban safety assessment, preliminary stage (Mr. Reinaldo Castillo).
- Viet Nam: Application of safety assessment methodology to near surface radioactive waste disposal facilities at nuclear research institute, Dalat (Mr. Van Lam Pham).

## 6. ISAM Virtual Workspace Group

*Progress during the RCM.* This group was formed during the second RCM. One participant from each Working Group and Safety Case Group was identified to be part of the group, which will manage the ISAM Virtual Workspace. The group will be lead by Mr G Hinterleitner at the IAEA. The Group will take responsibility for ensuring that the Workspace can be used effectively by all participants. It was noted that it would be beneficial to use the Workspace to make draft

material from the Working Groups available to the Safety Case Groups at an early stage.

*Future work.* The Group agreed to complete a review, which will result in a new version of the Workspace by May 1999 along with procedures for adding new material. Group members will also lead reviews in each of their Working/Safety Case Groups to identify what material should be added to the Workspace. The Group will meet again in June 1999 in Madrid.



**Mr. Gerd Hinterleitner**

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## 7. EDITORIAL NOTE

In the frame of a Technical Co-operation project between the IAEA and the Mexican Government for upgrading waste management safety, an international experts mission visited the country. The experts recognised the good quality of work being carried out by the secretary for energy, the national institute for nuclear research, the Federal Commission for Energy and the Mexican Nuclear regulatory authority on planning, design, construction and operation of a near surface facility for low-level radioactive waste. In order to progress on the safety assessment of the facility, the experts recommended to the Federal Commission for Energy its integration into the ISAM international project. As you already know Mr. Hermenegildo Maldonado, from the Mexican regulatory authority, is co-ordinating the Mexican contribution to our programme. Our new colleagues from Mexico are welcomed into the ISAM programme.



**IAEA mission to Mexico**



### IAEA Activities on Quantitative Acceptance criteria for Near Surface Facilities.

During April 1997 the IAEA started a project on quantitative acceptance criteria for near surface disposal of radioactive waste. The aim of this study is to develop and illustrate, through practical examples, an approach which allows the derivation of quantitative values based on radiation safety criteria. The first phase ended in

December 1998. Its aim was to derive post-closure waste safety acceptance criteria. The draft working material produced can be found on the ISAM Virtual Workspace:

<http://cobweb.quantisci.co.uk/bscw/bscw.cgi/0/306025>

## 8. REQUESTS FOR INFORMATION

Participants were requested to provide relevant information and to respond to ISAM questionnaires as summarised in Table 3.

Group	Request	Latest date/Contact name/Workspace Folder
General	Information on Member States' disposal/storage facilities for the ISAM CD-ROM (videos in NTSC format, documents in Word format.	September 1999 Mr. Paulo Heilbron
ISAM Virtual Workspace Group	None at this time.	
Scenario Generation and Justification Working Group	Comments on the technical document are invited from participants who are not working in this Group.	April 2000 Mr. Japie van Blerk
Modelling and Data Working Group	Comments on the technical document are invited from participants who are not working in this Group.	September 1999 Mr. Paulo Heilbron
Confidence Building Working Group	Response to the Compilations questionnaire. Response to the QA questionnaire. Response to the Communications questionnaire.	April 1999 Ms. Borislava Batandjjeva April 1999 Mr. John Harries April 1999 Mr. Laurent Dujacquier
Vault Safety Case Group	None at this time.	
Radon-type Facility Safety Case Group	None at this time.	
Borehole Safety Case Group	None at this time.	

Table 3. Requests to Participants for information

## 9. ISAM DOCUMENTS

*Currently available ISAM documents:*

**ISAM/NL/0196.-** ISAM Newsletter No 1. International Programme on Implementation of Safety Assessment Methodologies for Near Surface Facilities for Radioactive Waste. ISAM News, June 1996.

**ISAM/NL/0198.-** ISAM Newsletter No 2. International Programme on Implementation of Safety Assessment Methodologies for Near Surface Facilities for Radioactive Waste. ISAM News, March 1998.

**ISAM/NL/0298.-** ISAM Newsletter No 3. International Programme on Implementation of Safety Assessment Methodologies for Near Surface Facilities for Radioactive Waste. ISAM News, November 1998.

**ISAM/MS/0198.-** ISAM Working Groups Meeting Summary No 1. 1<sup>st</sup> Working Groups Meeting of the International Atomic Energy Agency's Co-ordinated Research Programme for Improving Long Term Safety Assessment Methodologies for Near Surface Radioactive Waste Disposal Facilities (ISAM), Rio de Janeiro, Brazil, 26-31 July 1998.

**ISAM/G/0197.-** ISAM, The International Programme for Improving Long Term Safety Assessment Methodologies for Near Surface Radioactive Waste Disposal Facilities: Objectives, Content and Work Programme. April 1997.

**ISAM/G/0297.** ISAM Questionnaire. April 1997.

**ISAM/G/0397.** ISAM Questionnaire: Summary of responses. February 1998.

**ISAM/CBWG/0198.-** ISAM Project. Confidence Building Working Group. Questionnaire, February 1998.

**ISAM/CBWG/0298.- ISAM Project.** Confidence Building Working Group. Questionnaire, April 1998.

**ISAM/CBWG/0398.-** Report on Application of QA Procedures to Safety Assessment for Near Surface Repositories. Version 0.0, July 1998.

**ISAM/CBWG/0498.- ISAM Project.** Confidence Building Working Group. *ISAM Document review Record*, July 1998.

**ISAM/CBWG/0598.- ISAM Project.** Confidence Building Working Group. *Questionnaire on Communication*, September 1998.

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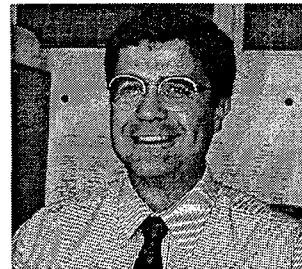
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